West Australia in the Smithsonian

By CHARLES M. HOY, Naturalist.

DURING the last year the Smithsonian Institution has had an addition to its collections in the shape of a shipment of specimens from West Australia. These specimens were collected and shipped by the writer and were secured in the southern and northern parts of that State. The greater part of the shipment consisted of the skins and skeletons of various marsupials, many of which were new to the museum's collection, and in addition there were several that are considered very rare and which are of great scientific value. Some of these marsupials will be mounted and placed on exhibit for the general public, while with others the skins will be filled out and placed in closed chests in the study ranges, where they will be available to all persons who are interested in the scientific study and comparison of the different mammals.

The shipment consisted of kangaroos, which I think are too widely known to need a description; various wallabies, which are merely small varieties of the former phalanger opossums, marsupial cats, bandicoots, rat kangaroos and the banded anteater. The phalanger opossums are, I think, very well known, especially among the ladies, for their beautiful fur. It is on account of this fur that they are mercilessly hunted and are being fast thinned out in many parts of Australia. There are many different kinds of these opossums, two of which are found in the southern part of West Australia.

Rat Kangaroo, Bandicoot And Marsupial Cat

Marsupial cats are small spotted animals about half the size of a full grown house cat. Like their namesake, the house cat, they are equally at home on the ground or in the trees and prey on anything from grasshoppers to mice and birds, and are not averse to raiding the chicken coop.

The bandicoot is a ratlike creature with an extremely long and slender nose. It is about the size of a cottontail rabbit, has very coarse spiny hair, and its fore limbs are armed with long and strong claws with which it digs out worms and insects.

Rat kangaroos are very graceful creatures and, as the name implies, they very closely resemble the kangaroos in structure. They build very cleverly concealed nests in the center of grass tussocks and, like the bandicoots, they have long claws on their front limbs with which they dig for roots and bulbs. They are very destructive when they get into a potato patch and for this reason the settlers wage a continued war against them.

The banded anteater is a little reddish brown animal with dark stripes running across its back, living entirely on ants and other insects. It is about the size and has very much the same appearance as a squirrel, including the bushy tail. In some ways it is one of the most interesting of the mammals, as its skeletal structure is of a very primitive form and it has more teeth than any other land mammal in existence. This little animal, owing to its not being able to stand the changed conditions of environment, caused by the settlement of the country, is fast becoming exterminated, and is at present to be found on a comparatively small part of its former range.

It is a sad fact that not only the above, but all the mammals of Australia, are, either from the fact that their fur or hides are of commercial value or that they to a certain extent destroy the farmers' crops, approaching ultimate extinction. Sad, because their habitat is limited to Australia and their extinction would mean a loss to the world of a peculiarly interesting group of primitive mammals.

Many of These Mammals Will Soon Be Extinct

The marsupials are a very interesting group in that they are among the most primitive mammals that exist at the present day. The young are born at a very immature stage and are usually carried about in a capacious pouch situated low down on the exterior of the mother's abdomen until they are able to run about and fend for themselves. When very small they are found so tightly adhered to the teat that their mouths will bleed if they are forcibly removed. This is caused by the fact that the end of the teat extends down into the gullet so as to enable the young to breathe and drink at the same time. The adherence of the young on the teat and the very embryonic stage in which they are found in the pouch has given rise to the belief among the Australians that they originate in the pouch, but, of course, this is not so.

With some of the marsupials it has been ascertained that the young crawl into the pouch by their own efforts, and it has been adduced that this is the case with all of them. The feasibility of this can be seen by the facts that when the young are born, although the hind legs are mere buds, the fore limbs are fully developed, claws and all, and that, if the young are removed from the pouch and placed on the body of the mother, they will immediately start crawling through the fur and nose about in a blind effort to reach the pouch.

When first born the marsupials are indeed comical looking objects. They are practically all head and shoulders, the mouth is merely a small round hole, there is no sign of the eyes and only a slight indication of where the ears will eventually be. The hair does not appear until all the various parts are fully developed and the young has taken on the general appearance of the adult. Even after the young has left the pouch for good it will keep with the mother and whenever thirsty will stick its head into the pouch and take a drink. The kangaroo very rarely has more than one young at a time, but with some of the other marsupials the number of young will go as high as ten. In some of the smaller species, where the number of young is ten, when they increase in size they can no longer be contained in the pouch, and so, when the mother is turned on her back, they present the appearance of a bunch of grapes tightly adhered to her abdomen.

Many thousands of people annually visit the various museums, but out of this great number there are only a few that go further than to admire the artistic and lifelike way in which the various groups of mammals are set up. Most people do not bother to think of how these animals are obtained, but back of every group there are stories of hardships endured and dangers gone through by the men that have collected the animals from the far corners of the world, stories that would make the wildest tales of fiction look tame. Hunger, privations, the ravages of unknown diseases and fevers and the menace of wild beasts and wilder men are everyday occurrences in the lives of the museum collectors.

The Smithsonian Institution sends men out to all parts of the world, and the lives of these men hang by a slender thread as they brave the dangers of the untrod wilderness in their quest after the furtherance of knowledge. Even where the collector does not go out into the wilds the expedition is far from a pleasure trip, for it entails the hardest kind of work. Traps must be set for the smaller animals, the homes of the burrowing ones must be dug out and trees felled to get the smaller tree dwelling animals. After the animals are obtained they must be carefully measured, after which they are skinned. The skins of the smaller ones are then filled out while the larger skins are cured with salt. The flesh must also be cut off the skeletons, after which they are dried.

Of course there is a certain amount of sport connected with the hunting of the larger and more dangerous animals, but where this is done day after day, year in and year out, the sport is minimized and it becomes hard work. However, when this life once gets into the blood of a man, despite its hardships and dangers, he is seldom content to give it up for the comparative ease of everyday life at home, for there is a responsiveness to the call of the wild, handed down from our savage ancestors, that lies dormant in every man to-day.

A Description of Little Known West Australia

The first camp that the writer made was in the extreme southwestern part of Australia, within four miles of the western coast. Here, except for a three mile fringe of dwarf scrub skirting the immediate coast, the country was covered with a forest of great eucalyptus trees, towering to a height of 200 feet and more. The country was of limestone formation and in many places resounded hollow to the tread of one's feet. In the coastal scrub were found the great gray kangaroo, standing to a height of six feet, and also the curious little "guagga" or rat tailed wallaby, a little kangaroolike animal standing at a maximum height of two feet, dark brown in color, with long silky fur, short naked tail and ears so short as to be scarcely noticeable above the fur.

The first couple of weeks that I was in camp I used to hear a noise like the beating of a great drum, which I couldn't account for, but one day I discovered its origin. It was caused by the great gray kangaroo standing on one of the hollow places in the earth and beating the ground with its tail. They would start slowly at first, gradually increasing the rapidity of the blows and then as gradually diminishing them, and would keep this up for five or ten minutes at a stretch.

The hunting of these larger kangaroos is not without an element of danger, for when wounded they will often turn at bay, and a large buck is no mean adversary for a man on foot. In fighting they will stand erect and spar with their forelimbs, the hands of which are armed with strong sharp claws about an inch in length. If hunted with a pack of dogs it is very seldom that one is killed without one or more of the dogs being severely wounded, and if the hunter is not right on the spot a large buck will make short work of a dog. Their favorite method is to seize the dogs in their forelimbs and then rip them open with the long central claw of their hind feet.

It is said by good authority that in a time of stress when no other way is handy the kangaroo will often seize the dog and carry him into the water, where it will hold him under with the weight of its chest and drown him. I have never seen this myself, but if it is true it is a thing that would well merit investigation as an evidence of unusual reasoning power in an animal that frequents water so little as the kangaroo.

In the forest country are found the phalanger opossums, marsupial cats, bandicoots and other small marsupials. The former live mostly in the hollows of the trees and are easily caught by setting a sapling slantwise against the foot of the tree. A wire snare is fastened on the center of the pole and the 'possum coming down the tree will take the easier route offered by the slanting stick and so will walk right into the snare. In this same fashion the marsupial cats are also secured. The bandicoots and other small animals were caught mostly in traps, but a few of all kinds were obtained through the use of a jacklight at night.

A Single Tide a Day Rises to 30 Feet

After finishing in the southern district the writer proceeded, by boat, to Derby, in the Kimberly district of West Australia. Here the tide is a very interesting phenomenon, as although there is only one tide a day it has a range of over thirty feet. The ships lie up to the wharf at high tide, and when the tide is out they are left high and dry on the mud. This contrasts very strongly with the southern coast, where the tide has a range of only a few feet. This great range of tide is not caused by the water piling up in a bay, for the ports of the northwest are situated right on the open coast.

The northern camp was situated on the banks of the Fitzroy River. Here the country is alternating open grass plains and scattered forest growth of stunted trees. Along the river there is a luxuriant growth of vegetation, but this does not extend over forty yards from the banks. The barren aspect of the country is caused by the sparse rainfall and is a great contrast to the forests of the south, where the rainfall is copious.

Owing to this barrenness the animal life is very limited in variety, there being only two kinds of marsupials that are found in any great numbers—the agile wallaby and the "carrabel." The agile wallaby is sandy yellow in color and stands about four feet in height. It is well named, for not only is it one of the fastest of the kangaroo family but it is the only one that, if one hind leg is broken, can balance on the other and still elude its pursuers. They stick mostly to the strip of jungle that fringes the river, and are to be found in great mobs numbering up to 600 and more. During the night they will range out over the grass plains to feed, but if one quietly approaches the river bank during the day and watches the other side he will see them lying about sleeping, playing or savagely fighting among themselves.

The "carrabels" are very pretty little animals, after the order of the kangaroos, light fawn in color, with a narrow dark brown stripe running down the middle of their back. They are very quiet and solitary animals and spend the day resting under a bush on the plains. They will often allow a person to pass within a few feet of them and after you have passed they will dart away at amazing speed, taking full advantage of every little bit of cover that they can find. The Fitzroy River also abounds in crocodiles, which fill the night with their roaring and splashing as they fight on the surface of the water. All the specimens secured were covered with great scars and wounds that testified to the fierceness of the fights that we witnessed almost nightly. They were not only a menace to any one fording the river but at night they would crawl right up into the camp in their search for food.

MR. HENRY J. PAIN, who for forty years was the pyrotechnist at Manhattan Beach, where New Yorkers of an earlier day were accustomed to be thrilled by his ingenious and amazing displays of fireworks, has compiled a picture book recording interesting and historic occasions on which his set pieces, super-rockets and daytime fireworks were used, which gives a comprehensive and adequate understanding of the field Mr. Pain covered in his forty years of experience in this field of amusement. "I often wonder," he writes, "what the fireworks man of 1970 will have to do to produce the 'oh's' and 'ah's' of the eighties and nineties." Wireless pyrotechnics may then be in vogue, or perhaps there will blaze forth man-controlled northern lights; but no matter how beautiful and how wonderful the effects then produced may be they will not give the spectators greater satisfaction than was given, or compel more sincere applause than has been won, by the man who wrote in fire the joy of Holland when Queen Wilhemina was crowned, gave visual expression to the satisfaction of Americans when Roosevelt was inaugurated in 1905, and saluted royalty and commoner in a score of countries from Japan to South Africa on all sorts of anniversaries which called for noise and flames in their proper observance. Mr. Pain's pictures are published by Pain's Fireworks Company.

The Danish Times and the Scandinavian Review have given their approval to the new edition of Andersen's "Fairy Tales and Stories," edited by Signe Toksvig and introduced by Francis Hackett. Many of the pictures by Eric Pape and sections of the text have been reproduced in Danish mediums in this country. The book was published last autumn by the Macmillan Company.

A Chinese Romance

(Continued from Preceding Page.)

your health's sake you should rest two weeks longer at least!"

I lay down meekly. "Very well," I said. "Obedience is my watchword!"

And for the prescribed time I lay in my pretty room—all my senses deeply responsive to the life going on in a Chinese household; the clang of small gongs that summoned the servants; much laughter coming faintly or clearly as my doors were opened or shut; the tap of lily feet along the passageway; the glimmer of Mme. Springtime's radiant pink or blue robes as she entered to inquire after my welfare or bring some new delicacy that had been procured for me. The smoke of incense from the altar floating into the room at intervals, with a pungent sweetness that roused vague memories and emotions. Everything in the house—hangings, clothes, furnishings—was saturated with this aroma. Mingled with a bitter smell, which is distilled by immense age, and touched with the irritative quality of dust, this odor now means China to me and it is more precious than all other perfumes in the world.

"But, Chan-King, life is nothing but food!" I protested, about the third day, when my fourth meal had been served to me early in the afternoon.

"But the quantities are small," he answered. "Much better way, don't you think, than taking great meals many hours apart?"

Early in the morning the young maid assigned to me would bring in a bowl of hot milk and biscuit. In our apartment, at half past eight, she would serve breakfast, consisting of soft boiled rice—congee—with various kinds of salty, sweet and sour preparations. At 11 o'clock there was turtle soup or chicken broth. At noon came tiffin, which consisted of substantial meat and vegetable dishes, fish and soup and dry boiled rice. Our midafternoon refreshment was noodles of wheat or bean flour, or perhaps a variety of fancy cakes. Tea, kept hot by a basket cozy, was always on hand in every room. At 7 the family dined, and, after two weeks were up, I joined them, sitting at the first table with mother and my husband. Dinner was an elaborate meal, in courses, with rice at the close. At bedtime came hot milk again, or sweet congee or perhaps tea, brewed from lotus seed or almonds. I was continually nibbling. I thought Chinese food delicious, particularly in my husband's province, noted for its delicious "crunchy" fried things.

But Chan-King had yearnings for American dishes. I gave the head cook minute instructions for preparing fricasseed chicken, fresh salads, beefsteak with Spanish sauce—even American hot cakes, and he enjoyed the American canned goods, with butter, cheese, jams and bread, which were brought in frequently from the port.

An episode that caused much merriment was Chan-King's initiation of his family into the mystery—and history—of chop suey. The rich joke of that "made-in-America" Chinese dish is penetrating to every household where the returned student is found. In Shanghai we had heard with amusement how the bewildered chef of the Y. M. C. A. cafe had gone down to one of the great transpacific liners lying in port to learn from the head cook on board just what this "chop suey," which all his returned student patrons were demanding, might be. Now, with memories of old college club activities prompting us, and with a skillful cook to carry out our directions, Chan-King and I introduced into the ancestral home that most misunderstood dish in all the world. The family agreed that, though vaguely familiar, it was unlike anything they had ever tried before, and they decided without dissenting vote that it was superior to fricasseed chicken, Spanish steak or hot cakes.

At this time my husband's brother, Lin-King, came home for a brief stay. I decided from photographs that he resembled his father, who was still away. Lin-King and Mme. Springtime seemed well suited to each other and happy, although the marriage had been arranged by their families and they had never seen each other before the ceremony. I decided that the old custom had much merit, after all—for other people—and said so to my husband, adding, "When our children are grown we must have them all marry Chinese." Chan-King looked at me long in silence and then, sighing humorously, he asked, "What of their father's example, my dear?"

Since my Chinese was still bookish and unpracticed in the all important matters of tone and local idiom I could not converse with the family, and at the dinner table and in my mother's apartment I was as silent and meek and pleasant of manner as Mme. Springtime herself. Mme. Springtime served formal tea to our many guests in absolute silence, with a sweet, fixed smile in the corners of her red mouth. I watched her with consuming interest, for she was acting as first daughter-in-law in my stead.

(Continued Next Sunday.)